



FUEL REPORT

Sample Rating Trend



ISO



Machine Id

143640 - BRIER CREEK

Component

Diesel Fuel

Fluid

No.2 DIESEL FUEL (ULTRALOW SULPHUR) (--- QTS)

DIAGNOSIS

Recommendation

We advise that you filter this fluid before use. All laboratory tests indicate that this sample meets specifications for No.2 ultra-low-sulfur diesel fuel.

Corrosion

All metal levels are normal indicating no corrosion in the system.

Contaminants

There is a high amount of particulates present in the fuel. The water content is negligible. There is no bacteria or fungus (yeast and/or mold) indicated in the sample.

Fuel Condition

Sulfur value derived by ASTM D5453 method for ULSD validation. Sulfur level is acceptable for ULSD specification.

SAMPLE INFORMATION		method	limit/base	current	history1	history2
Sample Number	Client Info			WC06135406	---	---
Sample Date	Client Info			29 Mar 2024	---	---
Machine Age	hrs	Client Info		0	---	---
Sample Status				ABNORMAL	---	---

PHYSICAL PROPERTIES		method	limit/base	current	history1	history2
Specific Gravity		*ASTM D1298	0.839	0.842	---	---
Fuel Color	text	*Visual Screen	Yellow	Red	---	---
ASTM Color	scalar	*ASTM D1500		L4.0	---	---
Visc @ 40°C	cSt	ASTM D445	3.0	2.6	---	---
Pensky-Martens Flash Point	°C	*PMCC Calculated	52	70.7	---	---

SULFUR CONTENT		method	limit/base	current	history1	history2
Sulfur	ppm	ASTM D5185m	10	12	---	---
Sulfur (UVF)	ppm	ASTM D5453		15	---	---

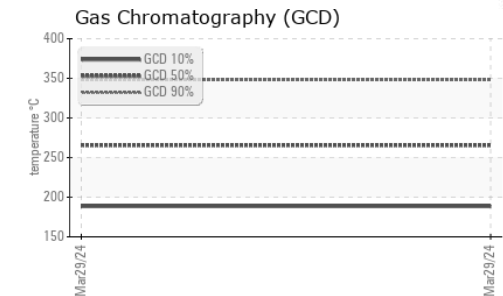
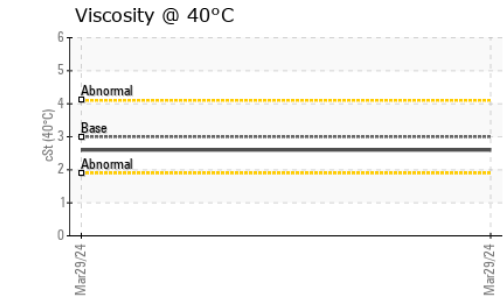
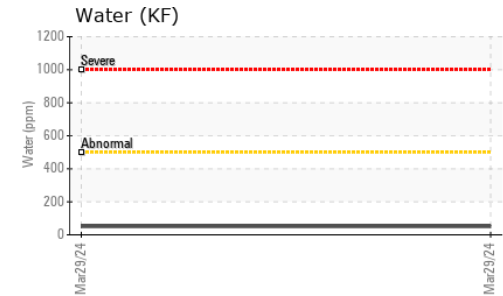
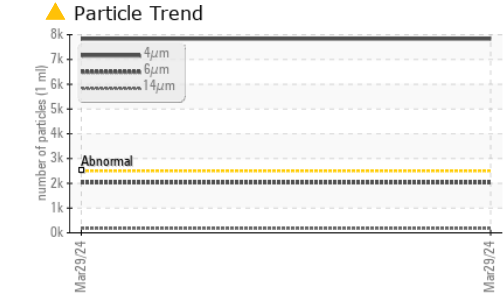
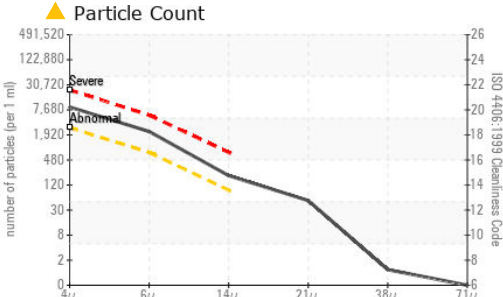
DISTILLATION		method	limit/base	current	history1	history2
Initial Boiling Point	°C	ASTM D86	165	178	---	---
5% Distillation Point	°C	ASTM D86		197	---	---
10% Distill Point	°C	ASTM D86	201	206	---	---
15% Distillation Point	°C	ASTM D86		213	---	---
20% Distill Point	°C	ASTM D86	216	220	---	---
30% Distill Point	°C	ASTM D86	230	234	---	---
40% Distill Point	°C	ASTM D86	243	247	---	---
50% Distill Point	°C	ASTM D86	255	260	---	---
60% Distill Point	°C	ASTM D86	267	274	---	---
70% Distill Point	°C	ASTM D86	280	288	---	---
80% Distill Point	°C	ASTM D86	295	304	---	---
85% Distillation Point	°C	ASTM D86		314	---	---
90% Distill Point	°C	ASTM D86	310	325	---	---
95% Distillation Point	°C	ASTM D86		341	---	---
Final Boiling Point	°C	ASTM D86	341	351	---	---
Distillation Residue	%	ASTM D86	3.0	1.4	---	---
Distillation Loss	%	ASTM D86	3.0	0.3	---	---

IGNITION QUALITY		method	limit/base	current	history1	history2
API Gravity		ASTM D7777	37.7	36.6	---	---
Cetane Index		ASTM D4737	<40.0	47.9	---	---

CONTAMINANTS		method	limit/base	current	history1	history2
Silicon	ppm	ASTM D5185m	<1.0	<1	---	---
Sodium	ppm	ASTM D5185m	<0.1	1	---	---
Potassium	ppm	ASTM D5185m	<0.1	0	---	---
Water	%	ASTM D6304	<0.05	0.005	---	---
ppm Water	ppm	ASTM D6304	<500	51	---	---
% Gasoline	%	*In-House	<0.50	0.0	---	---
% Biodiesel	%	*In-House	<20.0	0.0	---	---



FUEL REPORT

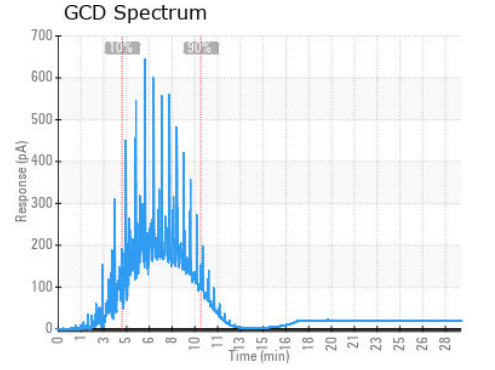
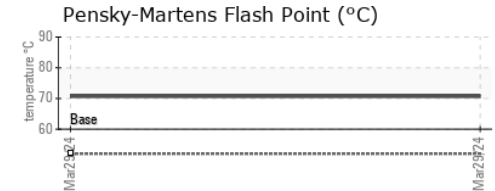
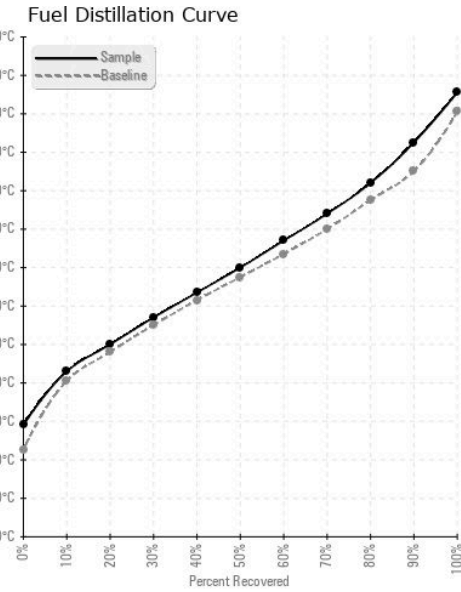


FLUID CLEANLINESS	method	limit/base	current	history1	history2
Particles >4µm	ASTM D7647	>2500	▲ 7833	---	---
Particles >6µm	ASTM D7647	>640	▲ 2027	---	---
Particles >14µm	ASTM D7647	>80	▲ 178	---	---
Particles >21µm	ASTM D7647	>20	▲ 45	---	---
Particles >38µm	ASTM D7647	>4	1	---	---
Particles >71µm	ASTM D7647	>3	0	---	---
Oil Cleanliness	ISO 4406 (c)	>18/16/13	▲ 20/18/15	---	---

HEAVY METALS	method	limit/base	current	history1	history2
Aluminum	ppm	ASTM D5185m <0.1	0	---	---
Nickel	ppm	ASTM D5185m <0.1	0	---	---
Lead	ppm	ASTM D5185m <0.1	0	---	---
Vanadium	ppm	ASTM D5185m <0.1	0	---	---
Iron	ppm	ASTM D5185m <0.1	2	---	---
Calcium	ppm	ASTM D5185m <0.1	0	---	---
Magnesium	ppm	ASTM D5185m <0.1	0	---	---
Phosphorus	ppm	ASTM D5185m <0.1	0	---	---
Zinc	ppm	ASTM D5185m <0.1	0	---	---

SAMPLE IMAGES	method	limit/base	current	history1	history2
Color				no image	no image
Bottom				no image	no image

GRAPHS



Laboratory : WearCheck USA - 501 Madison Ave., Cary, NC 27513
Sample No. : WC06135406 **Received** : 01 Apr 2024
Lab Number : **06135406** **Tested** : 11 Apr 2024
Unique Number : 10954871 **Diagnosed** : 11 Apr 2024 - Doug Bogart
Test Package : DF-2 (Additional Tests: Fuel, Screen)

COUCH OIL COMPANY
 2907 HILLSBOROUGH RD
 DURHAM, NC
 US 27705
 Contact: JESSE BROWN
 jesse@couchoilcompany.com
 T: (919)285-5408
 F:

To discuss this sample report, contact Customer Service at 1-800-237-1369.
 * - Denotes test methods that are outside of the ISO 17025 scope of accreditation.
 Statements of conformity to specifications are based on the simple acceptance decision rule (JCGM 106:2012)